## **Enhanced Protections in Rosendale Dairy Water Protection Permit**

The Rosendale Dairy permit, originally issued in March 2009 and modified in January 2010, is the most stringent water protection permit issued to a large farm since Wisconsin began its program 26 years ago. The dairy must meet stricter standards in some areas, and conduct more monitoring, than other farms with permits. Some of these enhanced water protections are listed below.

- **Groundwater monitoring:** Most permitted farms are not required to conduct groundwater monitoring; the few that do monitor quarterly. Rosendale has been required to monitor monthly. Under the permit modification, Rosendale will be allowed to revert to quarterly monitoring if none of their water samples exceed groundwater quality standards for 24 straight months. However, if any quarterly sample indicates exceedence of any groundwater standard, monitoring returns to monthly for all parameters.
- Additional spreading restrictions: Rosendale Dairy may not spread on areas of fields where
  groundwater or bedrock are within 24 inches of the surface. As part of their plan for managing manure
  and other nutrients, they must follow a conditionally-approved protocol for assessing the depth to
  groundwater before spreading. There are other groundwater protection requirements related to manure
  spreading in the permit and nutrient management plan.
- Additional monitoring: The permit prohibits Rosendale Dairy from allowing discharges of manure from subsurface drains or tiles and their nutrient management plan requires the dairy verify field conditions before applying manure to determine whether soils are saturated. Further, the nutrient management plan requires that the operation look for tile line discharges during and after spreading to assure that manure is not discharging from tile lines. If such discharges are observed, the dairy is required to report it as a spill and to take remedial measures.
- <u>Greater protections for wells</u>: Rosendale must keep at least 200 feet between private wells and where they spread manure. This 200-foot "setback" doubles the 100-foot setback that rules require and that most permitted farms are required to meet.
- Greater scrutiny of nutrient management plan: The nutrient management plan contains restrictions on the amount of nutrients that can be applied to fields depending on the time of year, type of crop grown, type of soil and field conditions. The plan also contains information regarding the nutrient content of the manure, soil analysis for nutrient content, and nutrient uptake of crops to be grown. The NMP plan for Rosendale Dairy has received a significantly greater amount of staff scrutiny than any other in the history of Wisconsin's permit program.
- Phosphorus discharge: Rosendale has chosen to use the Phosphorus Index as its method to determine each field's relative risk for sending phosphorus to lakes or rivers. Notably, all fields in the nutrient management plan achieve the target of 6 or less on all fields in the nutrient management plan, with the average Phosphorus Index at 4. (By comparison, DNR is proposing to update its statewide runoff rules so that farms meet a PI of 6, averaged over 8 years.)
- Other protections: Rosendale Dairy, like all permitted farms, must meet other requirements to protect lakes, rivers, wetlands and groundwater, including:
  - Have a minimum of 6 months storage for liquid manure
  - Not spread liquid manure during frozen/snow-covered conditions
  - Not spread liquid or solid manure during February or March
  - Collect detailed landspreading and inspection records
  - Control feedlot runoff to a zero discharge standard
  - Face enforcement action for failure to comply

